

REMARKS/ARGUMENTS

Claims 53-70 have been cancelled without prejudice. No claims have been amended or added.

35 U.S.C. § 103(a) Rejections

Examiner rejected claims 1-17, 19-49, 51, 52 and 71-78 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,167,248 (hereinafter "Hamalainen") in view of U.S. Patent 6,763,062 (hereinafter "Kohno").

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. See **In re Rijckaert**, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See **In Re Linter**, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See **In re Fine**, 837 F.2d 1071, 1074, 5

USPQ 2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See **In re Warner**, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), **cert denied**, 389 U.S. 1057 (1968). Courts have repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. See, e.g., **Grain Processing Corp. v. American Maize-Prods Co.**, 840 F.2d 902, 905, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in art would lead that individual to combine the relevant teachings of the references.'" **In re Lee**, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing **In re Fritch**, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'" **In re Dembiczak**, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

The Applicants believe that the Examiner is using impermissible hindsight to motivate the combination of the references to teach or suggest the limitations of claim 1 without any evidence that supports the combination. Briefly, Hamalainen teaches associated channels and Konho teaches smart antenna processing using an antenna array. However, there is no evidence that one skilled in the art would be motivated to base smart antenna strategies on data received in an associated channel rather than an uplink channel, as is usually the case for smart antenna processing. Hamalainen is not concerned with smart antenna processing at all. The Examiner must show using actual evidence, rather than conclusory statements, that the combination of Hamalainen and Konho would have been obvious to one of ordinary skill in the art at the time of the invention. At the present time the Examiner is merely using the Applicant's disclosure as a blueprint to reconstruct the claimed invention.

As discussed previously in more detail, Hamalainen first discloses a TDMA radio telephone system that establishes channels between base stations and remote terminals by conventional means (See col. 1 lines 17-39 and fig. 1). The conventional method for establishing such a channel requires a considerable amount of signaling (See col. 2 lines 30, 37) between the remote terminal and the base station. This signaling includes functions such as the sending of control

channel requests, assignment of channels, authentication checks, and installation of an encrypting mode, among others (See col. 1 lines 65-67).

Hamalainen improves on the conventional method of channel establishment by further disclosing a method of establishing a channel using parameters stored in the remote terminal and base station, rather than establishing a channel by the conventional method described above (See col. 2 lines 64-67 and col. 3 lines 1-9). Hamalainen also describes a Random Access Channel (RACH), which is a control channel shared by multiple remote terminals and which can be used to request the establishment of a data channel using stored parameters. The Access Grant Channel (AGCH) described by Hamalainen carries signals sent in response to signals received on the RACH.

Kohno first discloses a radio communication system having an array of antenna elements that applies a smart antenna processing strategy to the antenna elements to achieve directionality of transmission and reception (See col. 1 lines 12-49). This system, as described by Kohno, adapts to changes in the electromagnetic wave propagation environment by recalculating its smart antenna processing strategy at regular intervals (See col. 2 lines 19-26).

Kohno further discloses an improvement upon this system achieved by the recalculation of spatial weights in response to the detection of various changes in the electromagnetic wave propagation environment (See col. 3 lines

10-37). The Kohno system uses the most recent received signals to determine its smart antenna processing strategy, then transmits downlink data using the determined strategy (See col. 4 line 47-col. 6 line 33 and col. 10 lines 3-52).

In contrast to Hamalainen and Kohno, Claim 1 of the present invention requires "providing an associated channel for the first communication device to receive an uplink response signal from the remote communication device in response to the downlink data" and "determining a downlink smart antenna processing strategy using the received uplink response signal" Claims 21, 33, and 71 also incorporate similar language to this effect. These elements of the present invention are described on page 5, lines 4-6 and 18-20 of the present Application.

MPEP § 2143 states that to establish a prima facie case of obviousness, "the prior art reference (or references when combined) must teach or suggest all the claim limitations." By this standard, a prima facie case of obviousness is not established regarding Claims 1, 21, 33 and 71 of the present invention, since the cited prior art does not teach, among other things, the claim limitation of "determining a downlink smart antenna processing strategy using the received uplink response signal". Hamalainen only mentions the use of channels associated with data channels (See col. 16 line 65 - col. 17 line 2) but does not

suggest that such a channel can be used to determine a smart antenna processing strategy.

Furthermore, Kohno only mentions the use of received signals to determine a smart antenna processing strategy (See col. 17 lines 28-36). Kohno does not suggest that the smart antenna processing strategy can be determined from a response signal received on an associated channel in response to downlink data. Since neither Hamalainen nor Kohno suggests that a response signal received on an associated channel can be used to determine a smart antenna processing strategy, elements of Claims 1, 21, 33, and 71 are not taught by the cited prior art.

Since the prior art does not teach all elements of claims 1, 21, 33, and 71 of the present invention, a prima facie case of obviousness has not been established regarding these claims. Therefore, these claims are allowable over the cited art. Dependent claims 2-17 and 19-20 add further limitations to allowable independent claim 1, dependent claims 22-32 add further limitations to allowable independent claim 21, dependent claims 34-49, 51, and 52 add further limitations to allowable independent claim 33, and dependent claims 72-78 add further limitations to allowable independent claim 71. These dependent claims are thus allowable under 35 U.S.C. § 103(a). Therefore, the claims remaining in the Application should now be allowed.

35 U.S.C. § 103(a) Rejections

Examiner rejected claims 18 and 50 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,167,248 (hereinafter "Hamalainen") in view of U.S. Patent 6,763,062 (hereinafter "Kohno") as applied to claims 14 and 46 above, and further in view of Japan Patent JP 20000031896 (hereinafter "Speight").

For the reasons given above, claims 1 and 33 are allowable over Hamalainen in view of Kohno.

Examiner does not purport to show that Speight teaches the element expressed in claims 1 and 33 of "determining a downlink smart antenna processing strategy using the received uplink response signal", where the uplink response signal is a signal received on an associated channel in response to downlink data. Speight only teaches the use of a training sequence, not an uplink response signal, to determine a smart antenna processing strategy.

Since the above described element is not taught by Hamalainen, Kohno, or Speight, Claims 1 and 33 are allowable over Hamalainen, Kohno, and Speight. Since claim 18 adds further limitations to claim 1 and claim 50 adds further limitations to claim 33, claims 18 and 50 are therefore allowable.

CONCLUSION

Applicants respectfully submit the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Adam Furst at (408) 947-8200.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: 12/6/05

A handwritten signature in black ink, appearing to read 'Adam Furst', is written over a horizontal line.

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